Introducing DVR with Comcast Digital Cable

You'll never watch TV the same way again. Now you can:

Record all your favorite shows

With DVR (Digital Video Recorder) from Comcast Digital Cable, it's easy to record your favorite shows — just highlight a program in your on-screen program guide and press record. No tapes, timers, phone lines, or VCR required. You can even record two shows at the same time. Plus, if you subscribe to our dual-tuner HD-capable DVR you can record your favorite high-definition (HD) programs with your HDTV set.

With Smart Series Recording, you can easily program DVR to record your favorite series all season long. You can even set it to skip reruns. And you never have to worry about missing an episode, because DVR detects published lineup changes and adjusts recording times automatically.

Watch your favorite shows anytime you want

With DVR, there's always something on you want to watch. Watch shows you have recorded whenever it's convenient for you. Feel like watching *Lost* on Friday night? Or a movie you recorded earlier in the week? Watch what you want when you want.

Take control of live TV

With DVR, you can take control of live TV so you won't miss a single minute of a show you're watching. Need to answer the phone? Miss the punch line in your favorite sitcom? Want to see that football play again? With DVR you can:

- Record two programs at the same time while watching a previously recorded program.
- Pause a live program.
- Instantly replay live TV.
- Watch a scene in slow-motion.
- Rewind through the portion you have been watching.
- Fast-forward up to the point of live TV.

With DVR you get more out of your TV.

Getting started

Prepare your remote control

After you have connected the DVR box to your TV, press **Cable** on your remote control to ensure the remote is in cable mode. You can verify this by pressing the **Power** key to see if the DVR turns on and off.

Get to know your digital cable box with built-in DVR

Your DVR box is a dual-tuner Motorola DCT3412/3416 or DCT6412/6416 or a Pace TDC 575D — an advanced interactive digital cable receiver. It supports all the services offered by Comcast Digital Cable, including ON DEMAND (where available). The Motorola DVR boxes are also HD-capable.

- Motorola DCT3412/3416 or DCT6412/6416

- Pace TDC 575D (Not available in all areas)

Important safety instructions

The DVR box has an internal hard disk drive. To help reduce potential for damage, it must be handled in much the same way as a computer. Your DVR box has been designed to operate reliably in a well-ventilated household environment.

1. Position the DVR in an open space that allows airflow around the unit (there should be at least 2 inches of space on all sides).
   - Do not place the DVR in an enclosed entertainment unit or cabinet.
   - Do not place the DVR on a bed, sofa, rug, or similar surface.
2. Ensure that the DVR is not near any external heat source that could raise the temperature around the unit.
3. Plug the DVR into a surge protector along with your TV and other audio/video equipment.

Set your set-top box settings (Motorola only)

To achieve optimal picture quality on your TV, your Motorola DVR box must have the appropriate settings for your TV. In most cases, a Comcast technician will optimize these settings for you. However, you may decide to modify the settings for various reasons, such as getting a new TV. To access and change your settings, go to User Settings on your TV by following these steps:

Step 1: Access the User Settings Menu*

1. To access the User Settings Menu, power **On** your TV and power **Off** the DVR box.
2. Press the **Menu** button on either your remote or the front of your DVR box to call up the on-screen menu. You may use either the DVR front panel or remote to navigate the menu.
3. Press the ▲▼ buttons on your remote to select the setting you wish to change. Press the ◄► buttons to select an option for that setting. To exit the setting and move to another setting, use the ▲▼ buttons.

Step 2: Set your preference for watching wide-screen TV

The first user setting, referred to as "TV Type," tells the DVR box what type of TV you have and how you prefer to watch wide-screen programming.

For standard-screen TVs, choose either of the following options:

- 4:3 Pan Scan (wide-screen programming is cropped to fill your screen).
- 4:3 Letterbox (wide-screen programming will appear in its entirety with black bands on the top and bottom of the TV screen).

For wide-screen TVs, choose 16:9.

Step 3: Set picture resolution from DVR box to TV

The next setting is referred to as Y Pb Pr OUTPUT and indicates the picture resolution output from the DVR box to your TV. The choices are 480i, 480p, 720p, and 1080i. For most standard TVs, the appropriate setting is 480i. Choose 480p for enhanced-definition TVs. For HDTVs, choose either 720p or 1080i. Refer to your TV owner's manual and choose the setting that indicates the highest picture resolution your television will support.

Step 4: Set 4:3 override

This setting provides the ability to specify how 4:3 standard-definition programs are displayed on your TV. The choices are OFF, 480i, 480p, or stretch. For most standard TVs, this should be set to OFF (the DVR will default to the resolution selected in the previous setting). For HDTVs, the appropriate setting is either 480i, 480p, or stretch. If you have a wide-screen TV and select the stretch setting, 4:3 programs will automatically be stretched to a wide-screen 16:9 aspect ratio and display video in the format you specified in Step 3. Consult your HDTV owner's manual to determine the appropriate setting.

Step 5: Save your settings

Press the **Power** button on your DVR or your remote to exit the menu and save your settings.

Note: If you purchase an HDTV in the future and already have a Motorola DCT3412/3416 or DCT6412/6416 receiver call Comcast to have your HDTV channels authorized. You will probably need to modify these settings. If you have the Pace TDC 575D DVR, you will need to exchange your set-top box in order to view HD programming through your DVR.

**If the on-screen menu does not appear on your TV screen, your TV may not support the default setting. Use the DVR front panel LED display to view and change your settings. Use the up and down arrows to navigate categories and the left and right arrows to navigate within categories.*

Control live TV and recordings

With DVR, you can control your TV in ways you never imagined. Pause live TV when your best friend calls. View an instant replay, or rewind your favorite scenes over and over again — all with a push of a few buttons on your remote control.

Buffered programs

So how is all this possible? DVR creates a temporary recording of all programs you are watching. This temporary recording is referred to as a buffer. Depending on the DVR box you have, DVR automatically buffers at least the last 45 minutes of the program you're watching (15 minutes of an HD program) and continues to buffer the channel until you:

- **Switch to another channel** — When you change channels, DVR begins to buffer the program you just tuned to. It removes any previous programs stored in the buffer.
- **Turn off your DVR box** — When you turn off DVR, the buffer is erased.
- **Record a program** — When a scheduled recording begins or you press the **Record** ● button on your remote while watching live TV, DVR clears the buffer and stores it on the hard drive.

Tip The buffer length varies based on the type of channel you are watching.

- **Analog Channels*** — at least 45 minutes.
- **Digital Channels**** — up to 90 minutes.
- **HD Channels** (Motorola HD-capable DVR boxes only) — at least 15 minutes.

**Applies to Motorola DCT6412/6416 only (typically channels 100 and below).*

***Applies to Motorola DCT6412/6416 (typically channels 100 and above). Applies to Motorola DCT3412/3416 and Pace TDC 575D (all channels).*

Status Bar

The Status Bar appears whenever you use a playback control such as pause, rewind, or instant replay. It gives you details about the progress of the program you are watching.

White indicates other programs stored in the buffer.

Green indicates the portion of the current program stored in the buffer.

The white line marker indicates where you are in the program.

You can rewind back to previous programs in the buffer (the white portion). When you do, the status bar highlights that program by turning it green.

If you press **Record** ● the entire current program in the buffer will be recorded and turn red, even if you did not press Record at the beginning of the show. Previous programs in the buffer will be deleted.

Pause a live program

Use Pause to instantly freeze the action. Programs will remain in pause for up to the buffer length — at least 45 minutes for standard-definition programming or 15 minutes for high-definition programming.

1. As you watch TV, press **Pause** to instantly freeze the scene.
2. Press **Play** to resume the program.

Rewind or fast-forward a live program

You can rewind or fast-forward at four different speeds: 2x, 15x, 30x, and 60x.

1. Press **Rewind** or **Fast-Forward** up to four times to increase the speed. The display window on your DVR box indicates the rewind and fast-forward speeds. You will see RE1, RE2, RE3, and RE4 when you rewind. You will see FF1, FF2, FF3, and FF4 when you fast-forward.
2. Press **Play** to resume watching at normal speed.

Tip You can only fast-forward up to the point of the live broadcast — in other words, you can't fast-forward ahead of live TV.

View an Instant Replay

Immediately repeat the last 15 seconds of a live program or a recording.

1. Press **Instant Replay** to jump back 15 seconds.
2. Continue pressing **Instant Replay** until you arrive at the part you want to replay. Every additional press jumps back 15 more seconds.

Watch a program in slow-motion

DVR is equipped with slow-forward and slow-rewind functions to give you crisp and clear slow-motion images.

1. To use slow-rewind, press **Pause** and then press **Rewind**.
2. To activate slow-forward, press **Pause** and then press **Fast-Forward**.
3. Press **Play** to return to regular speed.

Catch up with a live TV program

When you pause or rewind a live program, you can either watch the buffered program or you can press LIVE or **Fast-Forward** to catch up to live TV.

- Press the LIVE button on your remote to return to the current portion of the live broadcast.

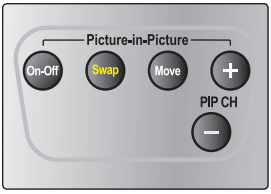
Tip The arrow buttons around the OK/Select button will also pause, fast-forward, and rewind the show you are currently watching. To use these buttons to browse the Flip Bar or navigate the Mini-Guide, press OK/Select to turn off their playback control functionality.

Control two programs at once

With DVR you don't have to choose between two programs that are on at the same time. You can control the action on both programs. This is because your DVR has two tuners and can buffer one program on each tuner. This is great when you want to watch two sporting events that air at the same time.

Swap between two programs

The Swap feature lets you switch back and forth between the two tuners so you can use the playback controls on your remote like pause, rewind, and instant replay to control both programs you are watching.



To use the Swap feature:

1. Tune to the first program you want to watch.
2. Press the Swap button on your remote to change tuners.
3. Tune to the second program you want to view.
4. Press Swap again to return to the first program.
5. Continue using the Swap button to toggle between the two programs. You can use rewind or instant replay to review what you have missed. Or use fast-forward to skip through portions you don't want to see.

Tip The Swap button is the key to keeping the buffer for both programs. If you flip between the two programs without using the Swap button, you will lose the buffer.

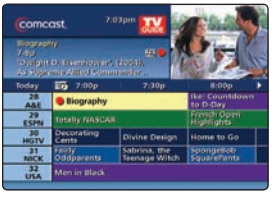
Note: The Picture-in-Picture On-Off, Move, PIP CH+, and PIP CH– buttons are currently not functional and are reserved for future use.

Record and play back programs

Depending on the DVR model you have, most DVRs can record up to 75 hours of standard-definition programming or 20 hours of high-definition programming. The Pace TDC 575D can record up to 55 hours of standard-definition programming. Storage space varies based on the type of channel (digital, analog, HD) you are recording.

DVR gives you several ways to record, including one-touch recording. And you never have to miss an episode, since DVR detects published lineup changes and adjusts recording times automatically. You can even skip reruns.

Record a single program



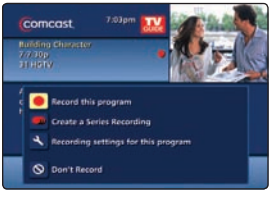
Record from TV Listings

1. Press Guide on your remote to view the TV Listings.
2. Highlight the program you want to record.
3. Press the **Record** button on your remote. A red dot appears next to the program title in the grid so you know the program is scheduled to record.

Record while watching TV

1. Simply press **Record** on your remote. A Recording Started notice appears to indicate recording has begun.
2. Press OK/Select on your remote to hide the notice, or just wait for it to disappear. Any portion of the program saved in the buffer will also be recorded.

Tip If you want to record a second program at the same time, use the Swap button to change tuners.



Record from the Program Information screen

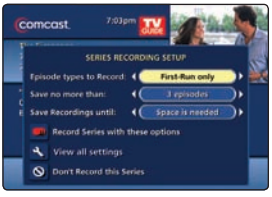
1. Press Guide on your remote to view the TV Listings.
2. Highlight a program and press Info on your remote. The Program Information screen appears.
3. Press **Record** on your remote or select the **Record** icon. A Confirmation screen appears.
4. Press OK/Select to record the program as planned, or select the **Recording Settings** icon to modify the recording settings.

Series recording

DVR makes it easy to record multiple episodes of a TV series.

Record a series

comcast
7:03pm
TV GUIDE
The Simpsons
9-9:30p
23 FOX
"Kamp Krusty". (1992). Bart and Lisa spend six weeks at Camp Krusty. However, the camp is not what it seems, as Bart and Lisa quickly find out. (30 Mins., CC, Stereo)
Return to the previous screen



1. Press Guide on your remote to view the TV Listings.
2. Highlight the TV series you want to record and press **Record** twice or press OK Select on your remote and select the **Record** icon from the Program Information screen.
3. The Confirmation screen appears. Select the **Create a Series Recording** icon.
4. Specify your recording options:
   - **Episode types to Record** — First Run Only, First Run and Repeats, or All Episodes.*
   - **Save no more than** — 1-7, or All Episodes.
   - **Save Recordings until** — "Space is Needed" or "I Delete."
5. Select the **Record Series with these options** icon to schedule the recording, or select the **View all Settings** icon to access advanced series setup features like adding minutes to the start and end times. See page 15 for more details on recording options.
6. Select the **Confirm Series Recording** icon to confirm the recording.

Note: Your series recordings will appear in your My Recordings list with the show title as its label. Multiple recordings of the same show will have the same label and will be listed beginning with the most recent recordings first.

**All Episodes should only be used when recording shows that do not have unique program IDs, like game shows.*

Create a manual recording

While scheduling a recording from TV Listings is the quickest way to schedule a recording, you may also set a manual recording based on a date, time, and channel. This is helpful when you want to record only a portion of a long program, such as CNN News. Select the DVR icon from the Quick Menu, then ***Set a Recording.*** Next, select ***Create a Manual Recording*** and follow the on-screen prompts.

Manage scheduling conflicts

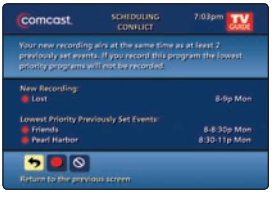
Any time you schedule more than two recordings for the same time, you will see a Scheduling Conflict message that allows you to select the program you want to record. DVR automatically prioritizes your scheduled recordings so you can easily select the program you wish to record in case of a conflict.

DVR uses two rules of prioritization:

- Single-program recordings always take priority over series recordings. For example, if you try to schedule an individual program to record at the same time as two series programs are scheduled to record, DVR will record the single program instead of one of the episodes of a Scheduled Series recording.
- The series you set up first has highest priority and will be recorded in case of a conflict with another series. As you add new series recordings, they are added to the bottom of the Series Priority List. You can modify the recording priority of a series using the Series Priority List. See page 13 for more details.

The Conflict screen automatically hides your highest-priority recording from view so you can choose between the show you are trying to schedule and the lowest-priority program.

Single program conflicts


comcast
SCHEDULING CONFLICT
7:03pm
TV GUIDE
Your new recording airs at the same time as at least 2 previously set events. If you record this program the lowest priority programs will not be recorded.
New Recording:
Lost
8-9p Mon
Lowest Priority Previously Set Events:
Friends
8-8:30p Mon
Pearl Harbor
8:30-11p Mon
Return to the previous screen

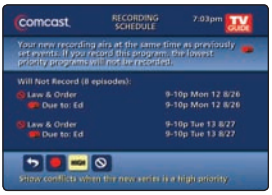
When trying to schedule a single program that conflicts with two other programs, the Conflict screen will indicate the title, date, and time of the program that will NOT record if you proceed with the new recording. Select an icon at the bottom of the screen to indicate which program you wish to record.

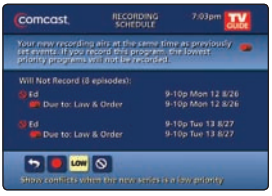
- Keep the new recording, remove old events.
- Remove new event, keep old events.

Note: If you want to delete your highest-priority recording not listed on the Conflict screen, you must delete it from your list of Scheduled Recordings (see page 13 for details on how to view your list of Scheduled Recordings).

Series conflicts

To help you manage which series gets recorded when there is a scheduling conflict, DVR automatically creates a Series Priority List. The first series you set to record has the highest priority and is the program recorded in case of a conflict. Each additional series you set to record is added to the end of the list.


comcast
RECORDING SCHEDULE
7:03pm
TV GUIDE
Your new recording airs at the same time as previously set events. If you record this program, the lowest priority programs will not be recorded.
Will Not Record (8 episodes):
Law & Order
Due to: Ed
9-10p Mon 12 8/26
9-10p Mon 12 8/26
Law & Order
Due to: Ed
9-10p Tue 13 8/27
9-10p Tue 13 8/27
HIGH
Show conflicts when the new series is a high priority


comcast
RECORDING SCHEDULE
7:03pm
TV GUIDE
Your new recording airs at the same time as previously set events. If you record this program, the lowest priority programs will not be recorded.
Will Not Record (8 episodes):
Ed
Due to: Law & Order
9-10p Mon 12 8/26
9-10p Mon 12 8/26
Ed
Due to: Law & Order
9-10p Tue 13 8/27
9-10p Tue 13 8/27
LOW
Show conflicts when the new series is a low priority

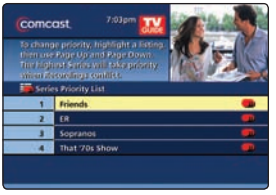
SERIES RECORDING CONFIRMATION
Your Series Recording will be set for the following program. To view canceled Recordings that conflict with this Series go to your DVR Scheduled Recordings.
Ed
Confirm Series Recording
View your DVR Scheduled Recordings
Change the priority for this Series

When you try to schedule a new series recording at the same time as previously scheduled series recordings, you will see a Series Conflict screen. The screen automatically hides your highest-priority program. It shows you the conflicts the new recording has with the lowest-priority series.

1. Use the on-screen icons to select the series you want to record:
   - Select the HIGH icon to give your new recording the highest scheduling priority and to capture the most number of episodes for your new recording.
   - Select the LOW icon to move the new series back to the bottom of the Series Priority List. The screen will refresh and give you revised results.
2. Select the **Record** icon to indicate your selection. The Confirmation screen appears.
3. Select the **Confirm Series Recording** icon to confirm your Series Recording. Use the down arrow ▼ button to go directly to your list of Scheduled Recordings or to your Series Priority List.

Modify the Series Priority List

You can easily change the recording priority of the series programs you have scheduled to record. The program with the highest priority will be recorded in case of a conflict.


comcast
7:03pm
TV GUIDE
To change priority, highlight a listing, then use Page Up and Page Down. The highest Series will take priority when recordings conflict.
Series Priority List
1 Friends
2 ER
3 Sopranos
4 That '70s Show

To modify your Series Priority List:

1. Select the DVR icon from the Quick Menu.
2. Select a ***Series Priority.***
3. Use the ▲▼ buttons to highlight a listing and use the **Page Up** button on your remote to raise the priority of the series or **Page Down** to lower it.
4. Then select the **Checkmark** icon to confirm your new Series Priority List.

Tip You can modify your Series Recording by highlighting the show and press OK Select.

View a list of programs scheduled to record

To see a list of programs you have scheduled to record in the future:

1. Select the DVR icon from the Quick Menu.
2. Select ***Scheduled Recordings*** to view your list.
   - The **Record** icon indicates the individual program will record as scheduled.
   - The **Series Record** icon indicates the series will record as planned.
   - The **Conflict** icon indicates a scheduling conflict with a specific episode of a series you have scheduled to record.

Note: You can modify your Series Priority List to record a program marked with a **Conflict** icon. See above for more details.

Tip Scheduled recordings are listed by days of the week. Press ▶ on your remote to see scheduled recordings for later in the week.

Play back a recorded program

comcast
7:03pm
TV GUIDE
Building Character
Mon 6/27 at 7p
30min
31 HGTV
A one-time trash incinerator that's home to an Oklahoma couple; a historic home in Austin; a former church that's home to an Arkansas couple. (Home and Garden)
Return to previous screen

Play back recordings whenever you want

1. Press the My DVR button on your remote or the DVR icon from the Quick Menu, then ***My Recordings.***
   - You can view and sort your recordings by title, date recorded, and channel. Use the right arrow ▶ button to scroll through the different views.
2. Highlight a program you want to play back and press the OK Select button on your remote to view the Program Information screen.
3. Select a playback option from the icons at the bottom of the screen.

- Return to previous screen.
- Play or resume from previous position.
- Restart from the beginning.
- Set a deletion priority for this program.
- Delete this program.
- Set locks for title, channel, or rating.

Tip You can play back a previously recorded program while you record two programs at the same time.

The Status Bar appears whenever you use a playback control such as pause, rewind, or instant replay. It gives you details about the progress of the recording you are watching.

The bar represents the length of the recording.

Green indicates the portion of the recording that has been played back.

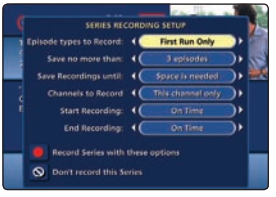
This area indicates the current status (paused in this case).

Cancel or modify a scheduled single recording

You can cancel or modify a Scheduled Recording at any time, even a recording that is currently in progress.

1. Select the DVR icon from the Quick Menu.
2. Select ***Scheduled Recordings*** to view a list of your scheduled recordings.
3. Select a program title and press the OK Select button on your remote to view the Program Information screen.
4. Select the **Record** icon to view your options.
5. Select the **Don't Record this program** icon to cancel the recording.
6. Select the **Recording Settings** icon to modify any of the following options:
   - **Save recordings until** — "I Delete" or "Space is Needed."
   - **Start Recording** — "On Time" or 1-15 minutes early.
   - **End Recording** — "On Time" or up to 2 hours later. This option is great if you are recording a sporting event that may go into overtime.

Cancel or modify a series recording

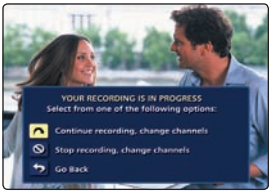


1. Select the DVR icon from the Quick Menu.
2. Select ***Series Priority.***
3. Highlight the series you want to cancel or modify and press OK Select.
4. Select the **Delete** icon to cancel the series recording.
5. Select the **Recording Settings** icon to modify any of the following options:
   - **Episode types to Record** — "First Run Only", "First Run and Repeats", or "All Episodes".*
   - **Save no more than** — "1-7", or "All Episodes".
   - **Save recordings until** — "Space is Needed" or "I Delete."
   - **Channels to Record** — "All channels" or "This channel only."
   - **Start Recording** — "On Time" or 1-15 minutes early.
   - **End Recording** — "On Time" or up to 2 hours later.
6. Select the **Record** icon to confirm your new selections.

**All Episodes should only be used when recording shows that do not have unique program IDs, like game shows. When selecting All Episodes your DVR will record duplicate shows.*

Recording notices

DVR will display notices to alert you when a recording may be interrupted or when a recording is about to begin.


YOUR RECORDING IS IN PROGRESS
Select from one of the following options:
Continue recording, change channels
Stop recording, change channels
Go Back

Recording in progress

If you try to change the channel while DVR is recording the program you are watching, you will see a notice reminding you that your recording is in progress.

You may:

- Select the icon to continue recording, change channels.
- Select the icon to stop recording, change channels.
- Select the icon to go back.

Tip When you select the icon it will automatically swap you to the other tuner to change channels and your recording will not be interrupted.

YOUR RECORDING IS STARTING
You have a Recording scheduled to begin on another channel.
The Simpsons
Change the channel when Recording begins
Don't change the channel, cancel Recording

Recording starting notice

Shortly before a recording is scheduled to begin on the tuner you are watching, a notice will appear giving you the opportunity to confirm or cancel the scheduled recording. If you do not select either option, DVR will automatically tune to the channel and begin recording at the scheduled time.

YOUR RECORDING SPACE IS LOW
You only have 20% of your total Recording space left. To be sure new Recordings are completed, you may want to delete some Recordings.
Continue with Recording
Go to DVR Recordings

Recording space low or full

When the available disk space is 20% or less, a notice will appear when you try to schedule a new recording.

When the notice appears, you may:

- Continue with recording. If recording space runs out during the recording, the recording will pause and the Recording Space Full notice will appear.
- Go to My Recordings and delete programs to make space for your new recordings.

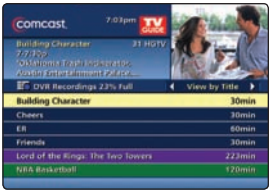
Note: Before the alert appears, DVR checks to see if there is enough space to begin the recording and automatically erases programs marked for removal if space is needed.

Manage programs and recordings

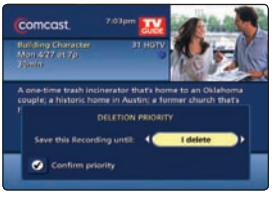
Maximize your storage space

With the Motorola DCT3412/3416 or DCT6412/6416, you can save up to 75 hours of standard-definition programming or up to 20 hours of HD programming. With the Pace TDC 575D, you can save up to 55 hours of standard-definition programming. To maximize your storage space, DVR is set to automatically erase programs when space is needed, beginning with the oldest recordings first. However, you can delete programs manually or modify the delete priority to save until "I Delete." You can also transfer "must have" recordings to a VHS tape.

Delete a recording or modify a delete priority



Comcast
7:03pm
TV GUIDE
Building Character
Mon 6/7 at 7p
31 HGTV
A one-time trash incinerator that's home to an Oklahoma couple; a historic home in Austin; a former church that's home to an Arkansas couple. (Home and Garden)
Return to previous screen



You can delete a recording or modify the delete priority of a program at any time.

1. Press the My DVR button on your remote and select ***My Recordings*** to view a list of your recordings.
2. Highlight a program title and press the OK Select button to view the Program Information screen.
3. To delete the program from your list of recordings, select the **Delete** ✕ icon. You will be asked to confirm that you want to delete this recording. Select **Delete** ✕ again to delete the recording.
4. To modify how long a recording will be saved, select the **Delete Priority** ⓘ icon from the Program Information screen. From there, you can change the delete priority to save a recording until "I Delete." To modify the delete priority for an entire series, you must select it from the Series Priority List.

Tip The blue bar at the top of your Recorded Programs list tells you how much space your recordings are using.

Copy recordings to a VHS tape

When you copy recordings to a VHS tape, make sure the recording is displayed on the main TV screen for the entire time the recording is being copied. If you change channels or display other DVR screens during the copying process, your tape will contain these images and you may not have a complete copy of the recording.

1. Connect an RCA video cable (yellow) to the VIDEO OUT (yellow) jack on the DVR and the VIDEO IN port on the VCR.
2. Connect RCA audio cables (one red and one white) to the AUDIO OUT R (red) and AUDIO OUT L (white) jacks on the DVR and to the AUDIO RIGHT and AUDIO LEFT inputs on the VCR.
3. Connect an RCA video cable (yellow) to the VIDEO OUT port on the VCR and the VIDEO INPUT port on the TV.
4. Connect RCA audio cables (one red and one white) to the AUDIO RIGHT and AUDIO LEFT outputs on the VCR and the AUDIO RIGHT and AUDIO LEFT inputs on the TV.
5. Put a tape in your VCR.
6. Select a program from your list of DVR Recordings.
7. From the Program Information screen, select K to play from the beginning.
8. Press Record on your VCR. As the recording plays, it is being taped to your VHS tape.

Note: To record high-definition programs to a VHS tape, a high-definition VCR is required in addition to your HD-capable DVR and HDTV and should be hooked up with Y Pb Pr, DVI, or S-Video.

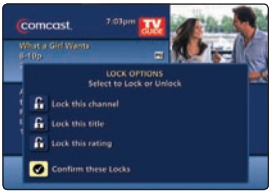
Parental Controls

Parental Locks put you in control of what your family watches. Parental Locks let you block selected ratings, channels, and titles with a Locks Personal Identification Number (PIN).

If you schedule a recording for a program you have locked, the program will be recorded. However, the audio is muted and no video will be visible while the program is recording. A restricted notice will appear allowing you to enter your PIN to view the program during recording.

Lock programs

You can set locks anytime while in the on-screen program guide or while watching television.



To lock a program or a recording:

1. Press the **Lock** (A) button on your remote.

   — OR —

   Select the **Lock** icon from the Program Information screen in the on-screen program guide.

2. Enter your four-digit PIN. If you are setting a lock for the first time, you will be prompted to set a four-digit PIN. This ensures your settings cannot be modified without your consent.

3. Lock the channel, title, or rating using the on-screen prompts.

A **Lock Indicator** will appear next to the title in TV Listings to let you know the program is locked.

Tip You may also restrict the purchase of pay programs with a separate Purchase PIN. To change your PIN or set up a Purchase PIN, select ***Setup*** from the Main Menu, then ***PINs Setup.***

Locks Setup

The Locks Setup screen allows you to review all of the locks you currently have set and to make modifications as needed.

To access Locks Setup:

1. Select the **Locks** icon from the Quick Menu, or select ***Parental Controls*** from the Main Menu.
2. Use the ▲▼◄► buttons on your remote to set or modify locks, hide adult titles, and access master locks.
3. Select ***Master Locks*** to modify all locks at one time. You can:
   - **Bypass Locks** — Temporarily opens all locks for easier viewing when sensitive viewers are not at risk.
   - **Clear Locks** — Permanently clears all locks.
4. Press OK Select on your remote to confirm your selections.

View locked programs

To view a locked program:

1. Select the program from TV Listings, or if it is a recorded program, select it from your list of DVR Recordings.
2. Using your numbered keypad on your remote, enter your PIN when prompted. The program will be displayed.

Frequently asked questions

Questions about your digital cable box with built-in DVR

How many hours of programming can I store on my DVR?

The number of recording hours for standard-definition or high-definition programming depends on the DVR model you currently have. With the Motorola DCT3412/3416 or DCT6412/6416, you can save up to 75 hours of standard-definition programming or up to 20 hours of HD programming. With the Pace TDC 575D, you can save up to 55 hours of standard-definition programming.

How many tuners does my DVR have?

DVR has two tuners, so you can record two programs at the same time.

Where can I find details on installing my DVR?

Go to the DVR Self-Install Guide on comcast.com. The guide contains documentation on how to connect your DVR to a standard- or high-definition television.

Can I receive and record programs in high-definition with my DVR?

Yes, as long as you subscribe to the HD-Capable Motorola DCT3412/3416 or DCT6412/6416 DVR and it is connected to a high-definition television, you can watch and record HDTV programming.

What happens if the DVR temporarily loses power?

All recordings saved prior to the power loss are preserved, as well as future recording schedules. You miss only recordings scheduled to record while the power was out.

If the power goes out, will my Parental Control and Purchase PINs, Favorite Channels, Locks, and Reminders be saved?

Yes. These items should not be lost if the DVR box loses power.

Questions about controlling a live program

How long can I pause live TV?

The pause length varies based on the type of channel you are watching. You can pause at least 45 minutes of a program on an analog channel (typically below channel 100) and up to 90 minutes of a program on a digital channel (typically above channel 100). If you are using an HD-capable DVR, programs on an HD channel can be paused for up to 15 minutes.

How far back can I rewind live TV?

DVR creates a buffer of a program you are watching as long as you remain tuned into that program. You can rewind at least 45 minutes of standard-definition programming, and programs on digital channels can be rewound for up to 90 minutes. If you are using an HD-capable DVR, you can rewind at least 15 minutes of high-definition programming.

If I'm watching a program in progress and want to record it, can I record it from the beginning?

Yes. As long as you were tuned to the program when it began. DVR saves the portion in the buffer, plus the remainder of the program.

How can I catch up to the live point of a program after I've paused it?

Press Live on the remote. Or, fast-forward to the point of live programming. The on-screen indicator will display "LIVE" once you reach the live point of the program.

How can I pause, rewind, and fast-forward two channels at once?

Use the Swap button on your remote to switch between tuners. Use the playback controls on your remote to control the program. The Swap button is the key to keeping the buffer for both programs. If you flip between channels without using the Swap button, you will lose the buffer.

Questions about recording programs and playing them back

Can I watch a program while I'm recording?

Sure. You can watch another live program or a previously recorded program while recording a program.

Can I record two shows that air at the same time?

Yes. Your DVR has two tuners, so you can record two programs at the same time. Just highlight each program in your on-screen program guide and press Record.

Can I watch a show I'm recording before the recording is completed?

Yes. You can either watch it in "real time" as it's being recorded, or you can rewind the program you are currently recording and watch it from the beginning while the recording continues.

Can I record music channels?

Yes. You can record and play back music channels.

Can I record ON DEMAND programs?

No. ON DEMAND programs cannot be recorded by the DVR. Keep in mind, however, that ON DEMAND programs are available to watch over a specified period and can start anytime you choose.

I have a home theater system. Can I record a program in Dolby® Digital 5.1?

Yes. If the program is broadcast with Dolby Digital 5.1 audio, the program will be recorded with Dolby Digital 5.1 audio. If the program was broadcast in analog sound, your recording will be in analog sound, despite the digital audio system's connection to your DVR.

What is the picture format of recorded programs?

DVR records programs in the same format they are broadcast. For example, programs broadcast in high-definition format are recorded in high-definition if you are using the HD-capable Motorola DCT3412/3416 or DCT6412/6416 and it is connected to an HDTV.

Can I set up my DVR to record every episode of a program?

Yes. When you create a series recording, select the Recording Settings icon. Specify the type(s) of episodes you want to record such as first run, first run and repeats, or all episodes. To record episodes that may air on other channels, select "All channels" from the channels to record option from the Create a Series Recording screen.

How do I change the priority of a series recording so that the series I want to record most gets recorded in case of a scheduling conflict?

The first series you set to record has the highest priority and is the program recorded in case of a conflict. Each additional series you set to record is added to the bottom of the list. Select the Series Priority List from the DVR Schedule menu and use your Page Up/Down buttons to modify your recording priorities.

What if the program I want to record runs beyond its scheduled time slot, such as when a football game goes into overtime? How can I make sure I record everything?

It's simple — select End Time from Recording Settings and add minutes or hours to extend your recording for up to 2 hours (see page 15 for more details on recording options).

I am recording a show that I am watching and want to watch something else. Will I lose the show I am recording?

When you change channels while recording a live TV show you are watching, a Recording is in Progress screen will appear. Select Continue recording, change channels to swap to the other tuner. The program you were watching will continue to record.

Does the DVR record the on-screen program guide, audio volume changes, or anything else that appears on the screen when I use the remote's keys?

No. DVR records only the video and audio of the program you are recording.

On occasion, a recording starts a minute or two after the program has begun. Why?

DVR is synced with TV Listings. If a network starts the program a minute earlier than the on-screen program guide's scheduled time, DVR will miss that first minute, unless you program DVR to start a minute early. Start times may be adjusted on the Recording Options screen.

Only part of my program recorded. Why?

If the beginning of the program did not record, you may have tuned to it after the program began. If the end of the program did not record, DVR may have reached its storage capacity before it was able to record the entire program. Another possibility is that the box may have lost power or cable signal during the recording.

Questions about managing your recordings

How long can I keep my recordings?

You can keep them as long as you want. Just remember, the recording space is limited, so you may need to erase some recorded programs from time to time in order to make room for new ones.

How will I know when I'm almost out of recording space?

A message will appear on-screen advising you when recording space is low (80% full) and when it's full. Note, if you are recording a program and run out of recording space, the recording will stop. You can always see how much recording space is available from the My Recordings screen. You can also manually erase recordings or set DVR to automatically erase recorded programs when space is needed.

Does the DVR automatically erase programs when the record space is full?

Yes. DVR is set to automatically erase programs when space is needed. DVR deletes the oldest recordings first. However, you can change the Delete Priority Setting to save recordings until "I Delete." See page 17 for details.

Can I erase part of a recording?

No. DVR can only erase the entire recording.

How many recordings can I schedule for the future?

There is no limit to the number of recordings you can schedule. Just make sure you have enough available recording space.

Can I make a VHS tape of a recorded program?

Yes. As you are watching a program you have recorded on your DVR, you can record it onto a VHS tape. Remember, the program you are watching is the one the VCR will record. If you switch to another channel, DVR will send the new channel's program to the VCR to be recorded. Also, if you access the on-screen program guide, Flip Bar, or browse function, those graphics will appear on your VHS recording.

Does Parental Control work with DVR?

Yes. The Parental Control feature restricts viewing of recorded programs. If you schedule a recording for a program you have locked, the program will be recorded; but while the program is recording, the video will not appear on-screen and the audio will be muted. A restricted notice will appear allowing you to enter your PIN to view the program during recording.

DVR Icons

DVR Menu

Search Menu

Series Recording

Record

Recording Settings

Play the Recording

Start the Recording from the Beginning

Delete the Program

Change the Delete Priority

Go Back

Tune to the Program

Set a Reminder

Display Other Showtimes

Favorite Channel

Set a Parental Lock

Confirm/Yes

Cancel

DVR remote control

Quick reference

Power
Press to individually turn on or off the DVR, TV, or AUX component.

Cable
Press to enable control of your digital cable/ DVR box.

TV
Press to enable control of your TV. (Note: This feature requires the digital remote to be programmed to operate your TV.)

Instant replay
Press to jump back 15 seconds for an instant replay.

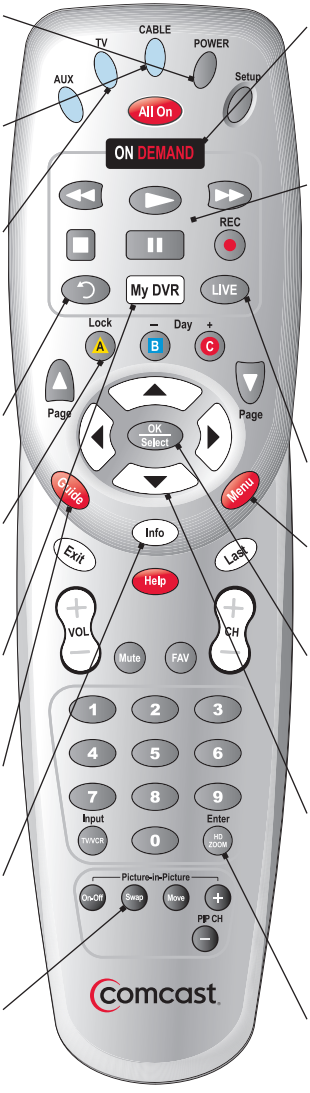
Lock
Press while watching a program or while in a listings menu to restrict viewing or purchase.

My DVR
Press to display a list of your recorded programs.

Guide
Press for a shortcut to TV Listings organized by time.

Info
Press to see a description of the highlighted program, if available.

Swap
Use to jump between two tuners and maintain buffer on each. See page 8 for details. All other PIP buttons are not functional and are reserved for future use.



ON DEMAND
Press ON DEMAND to access the menu of available ON DEMAND programming. (Not available in all areas.)

Video control
In CABLE mode, these buttons pause, fast-forward, rewind, and stop any DVR or ON DEMAND program you select. In the AUX mode, these buttons will control a VCR or DVD player, if programmed.

Live
Press to skip forward to live programming.

Menu
Press once to go to the Quick Menu or twice to go to the Main Menu.

OK / Select
Press to select a highlighted item. Also shows or hides program information while watching TV.

Arrows
Press to move the highlight to the next field in a menu or screen. Also use to browse what's on other channels while watching TV.

Enter / HD Zoom
In TV or AUX mode, press to enter channels on some TVs or information on menu screens.

Note: Your remote may vary slightly from the one pictured here. However, basic functions should remain the same.

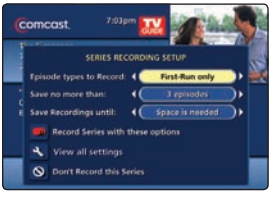
DVR Quick Tip Card

Easy steps to use the features of your DVR

How do I record a program?

You can set a recording with just one touch of the remote.

- While in the on-screen program guide, highlight the program you wish to record and press the **Record** button on your remote. A red dot appears in the Program Information window to indicate the program will be recorded.
- While watching live TV, simply press **Record**. A Recording Started notice appears to indicate recording has begun.



How do I record a series?

1. Highlight the TV series you want to record in the on-screen program guide and select the **Record** icon to view the overlay screen.
2. Select the **Create a Series Recording** icon and specify your recording options, such as the type of episode you want to record and how many episodes you want to save.
3. Press the **Record** or OK button to record the series with these options.

How do I watch a recording?

Press the My DVR button and select ***My Recordings*** to view a list of your recorded programs.

1. Highlight a program and press OK.
2. Press the **Play** button on your remote.

How do I view a list of programs scheduled to record?

1. Select the DVR icon from the Quick Menu.
2. Select ***Scheduled Recordings.***

DVR Quick Tip Card

Easy steps to use the features of your DVR

How do I pause, rewind, and instantly replay live TV?

Press **Pause**, **Rewind**, or **Instant Replay** on your remote.

How do I play in slow-motion?

Press **Pause**, then press **Fast-Forward** to view slow-motion in forward mode. Or press **Pause**, then **Rewind** to view slow-motion in reverse mode.

How do I return to live TV?

Press the LIVE button on your remote.

How do I change channels when I am watching a show that I am recording?

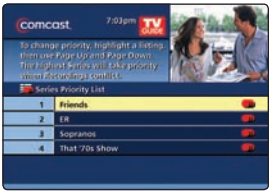
YOUR RECORDING IS IN PROGRESS
Select from one of the following options:
Continue recording, change channels
Stop recording, change channels
Go Back

When you are watching live TV and you get a message saying that your recording is in progress, select to **Continue recording, change channels.** You may now watch another program without interrupting your recording.

How do I start a recording early or extend the end time?

1. Select a program from your list of Scheduled Recordings.
2. Select the **Recording Settings** icon.
3. Arrow down to adjust start and end times.

How do I modify my Series Priority List?


comcast
7:01pm
TV GUIDE
To change priority, highlight a listing, then use Page Up and Page Down. The highest series will take priority when recordings conflict.
Series Priority List
1 Friends
2 ER
3 Sopranos
4 That '70s Show

1. Select DVR from the Quick Menu.
2. Select ***Series Priority.***
3. Highlight a listing and use the **Page Up/Down** buttons to modify the priorities.

Important notes about your DVR

- DVR is set to save programs until “Space is Needed.” You can change the delete priority to “I Delete” for all programs or for individual programs.
- You can easily determine how much disk space is available by accessing DVR Recordings. The blue bar indicates how much disk space is occupied.
- Parental Locks will not prevent a program from recording. However, the audio is muted and no video appears while it records.
- You cannot record ON DEMAND programs.

For more information, visit www.comcast.com.